386115

#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property **Organization**

International Bureau

(43) International Publication Date 4 August 2005 (04.08.2005)



## 

# (10) International Publication Number

(51) International Patent Classification:

WO 2005/070132 A2

Not classified

(21) International Application Number:

PCT/US2005/000768

- (22) International Filing Date: 14 January 2005 (14.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/536,791

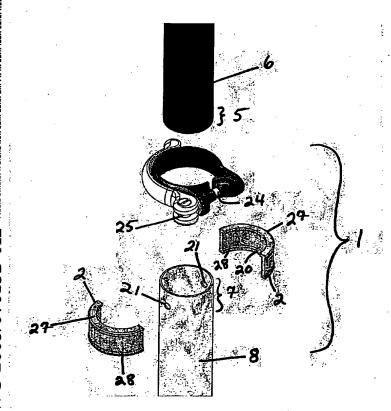
14 January 2004 (14.01.2004)

- (71) Applicant (for all designated States except US): ULTI-MATE SUPPORT SYSTEMS, INC. [US/US]; 2506 Zurich Road, Fort Collins, CO 80524 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): EASON, Donald, H. [US/US]; 1909 Tumberry Road, Fort Collins, CO 80524 (US).

- (74) Agent: WIEDMANN, Alfred, K., Jr.; Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, CO 80521 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG. PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: TELESCOPING MEMBER METHODS AND APPARATUS



(57) Abstract: The inventive technology may retate to a retention apparatus (1) that in at least one embodiment comprises a compression sleeve element (2) established at least partially 5 around portions of a first elongated member (6) that telescopes from a larger elongated member (8) in which it may nest. A relative motion obstruction element (4) may disallow only certain types of motion, e.g., rotational and axial, of the compression sleeve element relative to the elongated members around which it may be at least partially established. As it instead may be the compression enhancement element (3) - which may be used to 10 generate a retaining compression force element - that prevents perpendicular displacement of the compression sleeve element, deactivation and effective disengagement of the compression enhancement element may allow for a quick removal of the compression sleeve element without requiring that it be slid off an end of either elongated member.

## WO 2005/070132 A2



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.